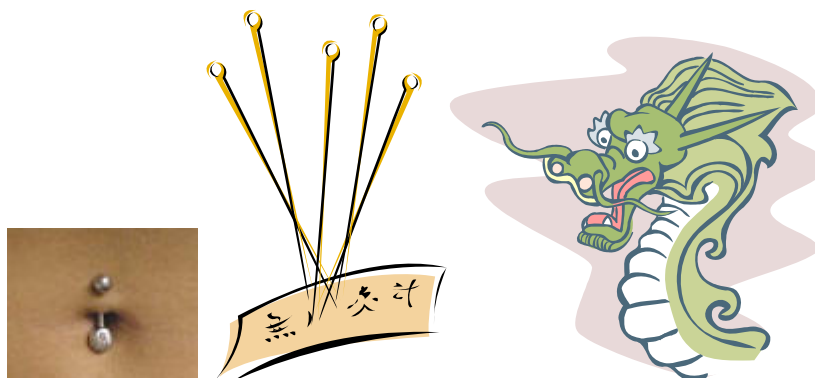


# **ESSEX HEALTH PROTECTION UNIT**

Part of the



## **INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS**



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# **ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS**

## **SECTION A – INTRODUCTION AND CONTACTS**

### **A1. Introduction**

These guidelines are primarily intended for Tattooists, Body Piercers, Acupuncturists and all those involved with micro pigmentation. They may also be useful to others involved in treatments such as manufacturers, importers, suppliers, purchasers and anyone considering these procedures. They replace all previous infection control guidance from the Essex Health Protection Unit (EHPU). This document has been written as a general guide, and is not intended as an exhaustive guide to all infectious diseases.

Infection control is an important part of an effective risk management programme to improve the quality of client care and the occupational health of staff.

Intact skin is one of the most important defences against microbial invasion. Any activity which involves the piercing of the skin poses a potential risk of infection. It is therefore very important to maintain strict hygiene controls and monitor sterilisation techniques to prevent this risk.

Poor and unhygienic practice can result in localised infections at the site of puncture or the transmission of blood-borne viruses, for example Hepatitis B/C or HIV, which have more serious consequences. The routes of transmission of infection may be different from one client to another.

The risk of transmission of infection may be minimised by the following:

- The cleanliness of the registered premises and the fixtures and fittings in those premises;
- The personal hygiene of the person registered to undertake treatment and any assistants;
- The cleaning and sterilisation of instruments, materials and equipment;
- In addition, any person who undertakes cosmetic piercing must have a suitable qualification.

## **A2. Contacts**

Infection Control advice can be obtained from:

Essex Health Protection Unit  
8 Collingwood Road  
Witham  
Essex  
CM8 2TT

Tel: 0845 155 0069  
Fax: 01376 302278

The Consultants in Communicable Disease Control and Communicable Disease Control Nurses are contactable via this number.

Advice is also available on the Internet at [www.hpa.org.uk/essex](http://www.hpa.org.uk/essex). Users are encouraged to ensure they have access to this site as it has advice and information on a wide range of local communicable disease issues, and during incidents will be updated at least daily with the current state of affairs.

Out of office hours – for URGENT communicable disease enquiries:

Contact 01245 444417, and ask for the on-call Public Health Person to be contacted.

# **ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS**

## **SECTION B – LEGAL FRAMEWORK**

### **B1. Legislation**

There are 2 pieces of legislation used by Local Authorities in England and Wales to control skin piercing activities:

- The London Local Authorities Act 1991 used by some local authorities in London. An annual licence is granted by the local authorities;
- The Local Government (miscellaneous provisions) Act 1982 which has been recently amended by the Local Government Act 2003, skin piercing activities that may be controlled under this act by a 'one-off' registration and not annual licensing and the subsequent application of bylaws are:
  - ❖ Acupuncture
  - ❖ Tattooing
  - ❖ Ear piercing
  - ❖ Electrolysis

Amendment by means of the Local Government Act 2003 (Section 120) gives Local Authorities specific powers to regulate businesses providing cosmetic piercing (ear piercing or body piercing) and semi-permanent skin colouring (e.g. micro pigmentation, semi-permanent make-up and temporary tattooing). This change in the law was brought into force on 1<sup>st</sup> April 2004.

Practitioners have responsibilities under the Health and Safety at Work Act 1974 and associated legislation. This applies to all employers, whether a business is registered with its Local Authority or not. It serves to protect employees and others such as members of the public who may be affected by a work activity.

The Tattooing of Minors Act 1969 makes it an offence to tattoo a person under 18 years of age. The issue of parental consent or proof of age should be considered when dealing with young people.

There is no statutory age limit for body piercing. Body piercing should not be undertaken on any person under the age of 18. Some practitioners will do so on 16 to 18 year olds with parental consent. Proof of age should be sought if there is any uncertainty.

The Prohibition of Female Circumcision Act 1985 prohibits mutilation or circumcision of female genitalia. It states that mutilation, cutting, piercing or surgically modifying genitalia for non-medical reasons is illegal.

The Medicines Act (1968) stated that administering a local anaesthetic by injection may only be practiced in law by a registered medical practitioner. The administration of local anaesthetic gels, creams and sprays is not recommended. Body piercers should not administer prescription-only medicines to their clients e.g. Emla cream. Ethyl Chloride is a highly flammable anaesthetic spray that is not recommended for use under any circumstances.

In September 2001, the first comprehensive UK guidance including infection control for Body Art was published (Barbour Index 2001).

In October 2001, the Health and Safety Executive/Local Authorities Enforcement Liaison Committee (HELA) produced their enforcement circular on health and safety issues related to body piercing, tattooing and scarification (LAC 76/2 and LAC 14/1).

This guidance aims to reflect advice given in both the Barbour index and HELA documents.

### **B1.1. Mobile Tattooing and Body Piercing**

Any person wishing to set up a mobile tattooing or body piercing business should seek advice from the Borough Licensing Department in the area before any tattooing or body piercing is undertaken.

Enforcement responsibilities (as detailed in LAC 76/2) (2005):

- Local Authority enforcement officers are not expected to assess the treatment techniques of operators but need to ensure that certain levels of hygiene and training exist and that operators are correctly licensed;
- Effective infection control is essential;
- Enforcement officers should ensure that a suitable working environment is maintained and that no aspects of business on the registered premises adversely affects the health of the public or those employed at the premises;
- The use of equipment falls to Local Authorities;
- Peripatetic use (mobile operators/those without fixed premises)/design/manufacturing/supply falls to the Health and Safety Executive (HSE). Any potential breaches to regulations that come under the HSE's area of influence should be passed to the HSE via the Enforcement Liaison Officer (ELO).

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS

## SECTION C – INFECTION, ITS CAUSES AND SPREAD

### C1. The Causes of Infection

Micro-organisms are integral to infections, and a basic insight into the characteristics of commonly encountered micro-organisms is essential for good infection control practice. Micro-organisms that cause disease are referred to as pathogenic organisms. They may be classified as follows:

**Bacteria** are minute organisms about one-thousandth to five-thousandth of a millimetre in diameter. They are susceptible to a greater or lesser extent to antibiotics.

**Viruses** are much smaller than bacteria and although they may survive outside the body for a time they can only grow inside cells of the body. Viruses are not susceptible to antibiotics, but there are a few anti-viral drugs available which are active against a limited number of viruses.

**Pathogenic Fungi** can be either moulds or yeasts. For example, a mould which causes infections in humans is *Trichophyton rubrum* which is one cause of ringworm and which can also infect nails. A common yeast infection is thrush caused by *Candida albicans*.

**Protozoa** are microscopic organisms, but larger than bacteria. Free-living and non-pathogenic protozoa include amoebae and paramecium. Examples of clinically important protozoa include *Giardia lamblia*, which causes an enteritis (symptoms of diarrhoea).

**Worms** are not always microscopic in size but pathogenic worms do cause infection and some can spread from person to person. Examples include threadworm and tapeworm.

**Prions** are infectious protein particles. For example the prion causing (New) Variant Creutzfeldt-Jakob Disease (vCJD).



## C2. The Spread of Infection

There are various means by which micro-organisms can be transferred from their reservoir to susceptible individuals. These are:

**Direct Contact.** Direct spread of infection occurs when one person infects the next by direct person-to-person contact (e.g. chickenpox, tuberculosis, sexually transmitted infections etc.).

**Indirect Contact.** Indirect spread of infection is said to occur when an intermediate carrier is involved in the spread of pathogens e.g. fomite or vector.

A **fomite** is defined as an object which becomes contaminated with infected organisms and which subsequently transmits those organisms to another person. Examples of potential fomites are instruments, trays or practically any inanimate article.

Crawling and flying insects are obvious examples of **vectors** and need to be controlled.

**Hands.** The hands of practitioners are probably the most important vehicles of cross-infection. The hands of patients can also carry microbes to other body sites, equipment and staff.

**Inhalation.** Inhalation spread occurs when pathogens exhaled or discharged into the atmosphere by an infected person are inhaled by and infect another person. The common cold and influenza are often cited as examples, but it is likely that hands and fomites (inanimate objects) are also important in the spread of respiratory viruses.

**Ingestion.** Infection can occur when organisms capable of infecting the gastro-intestinal tract are ingested. When these organisms are excreted faecally by an infected person, faecal-oral spread is said to occur. Organisms may be carried on fomites, hands or in food and drink e.g. Hepatitis A, *Salmonella*, *Campylobacter*.

**Inoculation.** Inoculation infection can occur following a “sharps” injury when blood contaminated with, for example, Hepatitis B virus is directly inoculated into the blood stream of the victim, thereby causing an infection. Bites from humans can also spread infection by the inoculation mode.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS

## SECTION D – STANDARD PRINCIPLES OF INFECTION CONTROL

### D1. Standard Principles of Infection Control

It is not always possible to identify people who may spread infection to others, therefore precautions to prevent the spread of infection must be followed at all times. These routine procedures are called **Standard Principles of Infection Control (or Universal Precautions)**.

Standard Principles of Infection Control include:

- Hand Hygiene and Skin Care
- Protective Clothing
- Safe Handling of Sharps (including Sharps Injury Management)
- Spillage Management.

All blood and body fluids are potentially infectious and precautions are necessary to prevent exposure to them. A disposable apron and latex, latex alternatives or vinyl gloves should always be worn when dealing with excretions, secretions, blood and body fluids.

Everyone involved in providing tattooing, body piercing, micropigmentation and acupuncture should know and apply the standard principles of infection control which includes hand decontamination, the use of protective clothing and the safe disposal of sharps. Each member of staff is accountable for his/her actions and must follow safe practices.

### D2. Hand Hygiene and Skin Care

There are two methods of hand decontamination which are handwashing with soap and water and the use of handrubs, both alcohol and non-alcohol based.

Hand decontamination is recognised as the single most effective method of controlling infection.

Hands must be decontaminated:

- Before and after each treatment session. Remove jewellery (rings) prior to treatment;
- Before and after physical contact with each client;
- Before putting on, and after removing, protective clothing, including gloves;
- After using the toilet, blowing your nose or covering a sneeze;
- Whenever hands become visibly soiled;
- After contact with body fluids;
- Before eating, drinking or handling food, and before and after smoking.

Note that alcoholic handrubs are only effective for visibly clean hands.

## **D2.1. How to Wash Your Hands**

Hands that are visibly soiled, or potentially grossly contaminated with dirt or organic material, must be washed with liquid soap and water.

An effective handwashing technique involves three stages:

### **1. Preparation**

- Before washing hands, all wrist and, ideally, hand jewellery should be removed;
- Cuts and abrasions must be covered with waterproof dressings;
- Fingernails should be kept short, clean and free from nail polish;
- Hands should be wet under warm running water before applying liquid soap or an antimicrobial preparation.

### **2. Washing and Rinsing**

- The handwash solution must come into contact with all of the surfaces of the hand;
- Hands must be rubbed together vigorously for a minimum of 15-30 seconds, paying particular attention to the tips of the fingers, the thumbs and the areas between the fingers (see figure 1);
- Hands should be rinsed thoroughly.

## **Hygienic Hand Disinfection for Tattooing, Body Piercing and Acupuncture**

This can either be achieved by using antiseptic liquid soap, or by routine handwashing as demonstrated below, followed by application of an alcohol handrub as recommended by the manufacturer.

### **3. Drying**

- Dry hands thoroughly using good quality paper towels
- Disposable paper towels are the method of choice because communal towels can be a source of cross-contamination
- Store paper towels in a wall-mounted dispenser next to the washbasin, and throw them away in a pedal-operated domestic waste bin
- Do not use your hands to lift the lid or they will become re-contaminated.

Hot air dryers are not recommended. However, if they are used, they must be regularly serviced and users must dry hands completely before moving away.

### **Alcohol Handrubs/Gels**

Hands should be free from dirt and organic material. The handrub solution must come into contact with all surfaces of the hands. They should be rubbed together vigorously, paying particular attention to the tips of the fingers, the thumbs and finger webs until the solution has evaporated and the hands are dry, as described in Figure 1.

### **Hand Creams**

An emollient hand cream should be applied regularly to protect skin from the drying effects of regular hand decontamination.

If a particular soap, antimicrobial hand wash or alcohol product causes skin irritation, your Occupational Health Advisor or the General Practitioner (GP) should be consulted.

Figure 1 – Hand Cleaning Techniques

## HAND CLEANING TECHNIQUES

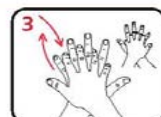
### How to handrub? WITH ALCOHOL HANDRUB



Apply a small amount (about 3ml) of the product in a cupped hand, covering all surfaces



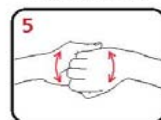
Rub hands palm to palm



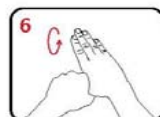
Rub back of each hand with the palm of other hand with fingers interlaced



Rub palm to palm with fingers interlaced



Rub with backs of fingers to opposing palms with fingers interlocked



Rub each thumb clasped in opposite hand using rotational movement



Rub tips of fingers in opposite palm in a circular motion



Rub each wrist with opposite hand



Once dry, your hands are safe



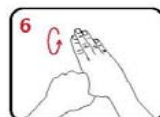
### How to handwash? WITH SOAP AND WATER



Wet hands with water



Apply enough soap to cover all hand surfaces



Rub each thumb clasped in opposite hand using rotational movement



Rub tips of fingers in opposite palm in a circular motion



Rub each wrist with opposite hand



Rinse hands with water



Use elbow to turn off tap



Dry thoroughly with a single-use towel



Your hands are now safe



Adapted from WHO World Alliance for Patient Safety 2006

**NHS**

**National Patient Safety Agency**

**cleanyourhands®**  
campaign



## **D2.2. Hand Decontamination Facilities**

### **Hand Washing**

Facilities should be adequate and conveniently located. Ideally, handwashing facilities must be available in the room where client consultations and procedures take place. Alternatively, facilities to do so should be a short distance away. They should have elbow or foot-operated mixer taps. A separate sink should be available for other cleaning purposes - such as cleaning instruments:

- Use wall-mounted liquid soap dispensers with disposable soap cartridges - keep them clean and replenished;
- Dispensers should be dismantled and washed regularly with particular attention to the nozzle;
- Place disposable paper towel dispensers next to the basins - soft towels will help to avoid skin abrasions;
- Position foot-operated pedal bins near the hand washbasin - ensure they are the right size for the amount of waste generated (note: Health & Safety regulations recommend a metal, fireproof bin).

### **Location of Alcohol Handrubs/Gels**

- Dispensers should be wall-mounted outside all treatment rooms
- Wall-mounted or free-standing in all treatment rooms

Note that there are instances where a risk assessment is required for placement of alcoholic rub dispenser, particularly where monitoring of its use is difficult.

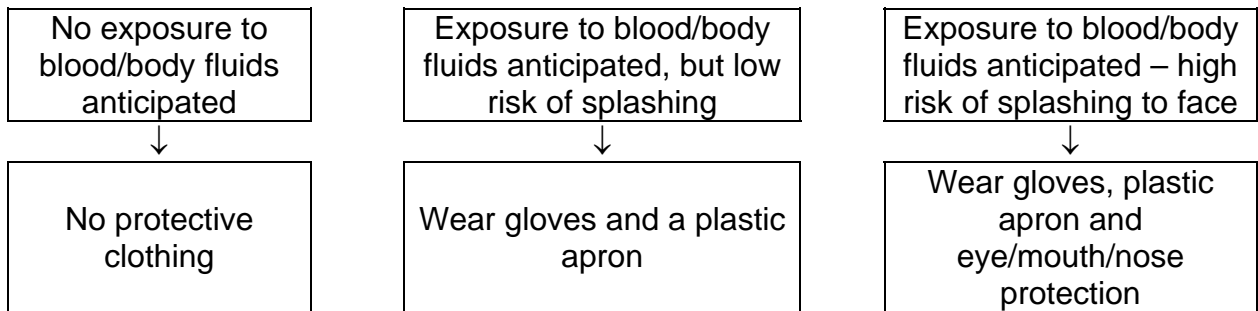
<h2><b>D3. Protective Clothing</b></h2>
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### **D3.1. Assessment of Risk**

Another element of standard principles of infection control is the wearing of protective clothing. The aim is to protect customers from micro-organisms that may be present on the operator's hands, and also to shield the operator from the customer's blood or skin micro-organisms.

Selection of protective equipment must be based on an assessment of the risk of transmission of infection between the client and practitioner.

## WHAT TO WEAR WHEN



### D3.2. Types of Protective Clothing

#### Disposable Gloves

Gloves must be worn for invasive procedures and all activities that have been assessed as carrying a risk of exposure to blood, body fluids, secretions and excretions, or to sharp or contaminated instruments.

Gloves that conform to European Community (CE) standards must be available.

**DO NOT USE** powdered gloves or polythene gloves.

Gloves must be worn as single-use items. They must be put on immediately before an episode of client contact and removed as soon as the activity is completed.

Gloves must be changed between treatments for different clients and disposed of as clinical waste.

Hands should be washed after gloves have been removed. Note that gloves are not a substitute for handwashing.

Sensitivity to natural rubber latex in clients and staff must be documented. Alternatives to natural rubber latex gloves must be available, such as nitrile gloves.

Gloves should **not** be washed between clients as the gloves may be damaged by the soap solution and, if punctured unknowingly, may cause body fluid to remain in direct contact with skin for prolonged periods.

#### 1. Non Sterile Gloves

Should be used when hands may come into contact with blood/body fluids, the oral cavity and when cleaning up items contaminated with body fluids such as equipment.

**2. General-purpose Utility Gloves**

General-purpose utility gloves, e.g. rubber household gloves, can be used for cleaning instruments prior to sterilisation, or when coming into contact with surfaces or items possibly contaminated with blood or body fluids. Ideally, colour coding of such gloves should be used e.g. blue for the kitchen, yellow for general environmental cleaning and pink/red for 'dirty' duties. This will help prevent cross-infection from one area of work to another. The gloves should be washed with general-purpose detergent (GPD) and hot water, and dried between uses. They should be discarded weekly, or more frequently if the gloves become damaged.

**3. Polyurethane/polythene Gloves (Non Sterile and Sterile)**

Polyurethane/polythene gloves do not act as a barrier to infection. They do not meet the Health and Safety Commission regulations and **SHOULD NOT BE USED.**

Hands must be decontaminated prior to, and after use of gloves when performing any tattooing or body piercing procedure.

**Disposable Plastic Aprons**

Apart from gloves, the operator should wear clean and washable clothing. A disposable plastic apron is useful for keeping work clothes clean and should be worn when there is a risk that clothing may be exposed to blood, body fluids, secretions or excretions.

Plastic aprons should be worn as single-use items, for one procedure or episode of client care. These should then be discarded and disposed of as clinical waste.

**Face Masks and Eye Protection**

These must be worn where there is a risk of blood, body fluids, secretions or excretions splashing into the face and eyes. Their use will be very dependent on a risk assessment of the type of procedure being envisaged, such as manual decontamination of equipment where aerosols can be generated.



#### **D4. Safe Handling of Sharps**

All staff should be fully immunised according to national policy. In addition, all those handling sharps should have had a course of Hepatitis B vaccine. A record of Hepatitis B antibody response should be kept for all staff that has regular exposure to blood/blood-stained body fluids.

Care should be taken to avoid accidental needlestick injury, as exposure to contaminated blood may be associated with transmission of blood-borne viruses (BBVs).

Sharps include needles, scalpels, sharp instruments and broken crockery and glass. Sharps must be handled and disposed of safely to reduce the risk of exposure to blood-borne viruses. Always take extreme care when using and disposing of sharps. Avoid using sharps whenever possible.

- Sharps should be single-use only, or if re-useable be capable of sterilisation;
- Do not re-sheath a used needle - if this is necessary, a safe method, i.e. a re-sheathing device, must be used;
- Discard sharps directly into a sharps container immediately after use and at the point of use;
- Sharps containers should be available at each location where sharps are used;
- Sharps containers must comply with UN 3921 and BS7320 standards;
- Close the aperture to the sharps container when carrying or if left unsupervised to prevent spillage or tampering;
- Place sharps containers on a level stable surface;
- Do not place sharps containers on the floor, window sills or above shoulder height - use wall or trolley brackets;
- Assemble sharps containers by following the manufacturer's instructions;
- Carry sharps containers by the handle - do not hold them close to the body;
- Never leave sharps lying around;
- Do not try to retrieve items from a sharps container;
- Do not try to press sharps down to make more room;

- Lock the container when it is three-quarter full using the closure mechanism;
- Label sharps containers with the source details prior to disposal;
- Place damaged sharps containers inside a larger container - lock and label prior to disposal. Do **not** place inside yellow clinical waste bag.

**For Management of Sharps Injuries, see Section E – Avoidance and Management of Sharps Injuries.**

## **D5. Spillage Management**

Deal with blood and body fluid spills quickly and effectively (see Method 1 and Method 2 below).

A 'grab bucket' containing all the relevant equipment should be readily available to deal with a spillage of body fluids. The kit should be kept in a designated place (depending on the size of the establishment there may be more than one kit).

The kit should comprise:

- 'Nappy' type bucket with a lid
- 'Non-sterile', unpowdered latex gloves or vinyl gloves
- Disposable plastic apron
- Disposable paper towels
- Disposable cloths
- Clinical waste bag
- Small container of general-purpose detergent
- Hypochlorite solution (e.g. Household bleach or Milton) or Sodium Dichloroisocyanurate compound (NaDCC) (e.g. Presept, Sanichlor) – to comply with COSHH 1988. Note that this compound should be stored in a lockable cupboard
- Absorbent powder e.g. Vernagel (absorbent crystals) to soak up the liquid content of the spillage. Alternatively, disposable paper towels can be used to soak up excess fluid.

The kit should be immediately replenished after use. Ready-made spillage kits are available from manufacturers.

For spillage of high-risk body fluids such as blood, method 1 below is recommended. For spillage of low-risk body fluids (non-blood containing fluids) such as excreta, vomit etc., use Method 2.

### **Method 1 – Hypochlorite / Sodium Dichloroisocyanurates (NaDCC):**

- Prevent access to the area containing the spillage until it has been safely dealt with;
- Open the windows to ventilate the room if possible;
- Wear protective clothing;
- Soak up excess fluid using disposable paper towels and/or absorbent powder e.g. vermagel;
- Cover area with NaDCC granules (e.g. Presept, Sanichlor).

or

- Cover area with towels soaked in 10,000 parts per million of available chlorine (1% hypochlorite solution = 1 part household bleach to 9 parts water) e.g. household bleach, Milton, and leave for at least two minutes;
- Remove organic matter using the towels and discard as clinical waste;
- Clean area with detergent and hot water;
- Rinse area with water and dry thoroughly;
- Clean the bucket/bowl in fresh soapy water and dry;
- Discard protective clothing as clinical waste;
- Wash hands.

### **Method 2 – Using Detergent and Water**

- Prevent access to the area until spillage has been safely dealt with;
- Wear protective clothing;
- Mop up organic matter with paper towels and/or absorbent crystals;
- Clean surface thoroughly using a solution of detergent and hot water and paper towels or disposable cloths;
- Rinse the surface and dry thoroughly;
- Dispose of materials as clinical waste;
- Clean the bucket/bowl in fresh hot, soapy water and dry;

- Discard protective clothing as clinical waste;
- Wash hands.

**N.B. – For spills on carpets and upholstery with or without visible blood**

- Wear protective clothing;
- Mop up organic matter with paper towels or disposable cloths and/or absorbent crystals;
- Clean area with cold water;
- Clean area thoroughly with detergent and hot water;
- Allow to dry;
- Discard protective clothing;
- Wash hands;
- Ideally, once dry go over area with a mechanical cleaner.

# **ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS**

## **SECTION E – AVOIDANCE AND MANAGEMENT OF SHARPS INJURIES**

### **E1. Occupational Injuries**

All blood and body fluids should be considered as potentially infectious. Some clients may be infected (knowingly or unknowingly) with Hepatitis B, Hepatitis C or HIV and it is important to know what action to take in the event of a sharps injury or splash contamination incident.

Sharps injuries/splash contamination incidents include:

- Inoculation of blood by a needle or other 'sharp';
- Contamination of broken skin with blood;
- Blood splashes to mucous membrane e.g. eyes or mouth;
- Contamination where the individual has an open wound and clothes have been soaked by blood;
- Bites (where the skin is broken).

The risks of transmission from infected carriers in the event of a sharps injury have been estimated to be approximately:

- Hepatitis B (high-risk carrier)      1 in 3;
- Hepatitis C      1 in 30;
- HIV      1 in 300.

## **E2. Prevention**

### **a) Vaccination**

It is strongly recommended that you receive a full course of Hepatitis B vaccine which can be provided through your GP or at a travel clinic. For pre-exposure prophylaxis we would recommend an accelerated schedule consisting of 4 doses at 0, 1, 2 and 12 months. It is very important that you have a blood test 2 months after completion of the course to check that you have responded adequately.

If the response is not sufficient, the doctor will investigate whether there is a specific reason for non-response to the vaccine. It is most important for non-responders to know their status. They may need to be protected by other measures (e.g. immunoglobulin) following a needlestick injury. There are, as yet, no vaccines available against Hepatitis C or HIV.

### **b) Safe Handling of Sharps**

The best protection against sharps incidents is prevention.

**See Section D4 Safe Handling of Sharps.**

### **c) Management of Sharps Injuries**

If a sharps injury/contamination incident occurs:

1. Encourage bleeding from the wound (if not bleeding freely);
2. Wash the wound in soap and warm running water (do not scrub);
3. Cover the wound with a dressing;
4. Ensure the sharp is disposed of safely into a sharps container;
5. If a splash to the skin, eyes or mouth occurs, wash in plenty of water;
6. An incident form should be completed as soon as the recipient of the injury is able;
7. The incident should be reported to the Accident and Emergency Department or GP.

Contact your GP without delay. The doctor will take an exposure history from you and determine what further action needs to be taken. Note that if the surgery is closed you may have to seek advice from the local Accident and Emergency Department.

You may be offered a booster dose of vaccine (even if you have been fully vaccinated) to provide additional protection. If you have not yet completed the course of vaccine you will be given the next dose of vaccine and advised on how to complete the schedule. If you have not started a course of vaccine, an accelerated course consisting of 3 doses at 0, 7 and 21 days followed by a 4<sup>th</sup> dose at 12 months after the first dose should be given.

Dependent on the incident your doctor may also take a blood sample from you at the time and retest you approximately 6 months later to provide reassurance that you have not been infected.

If the client involved in the contamination incident is known to be a Hepatitis B or Hepatitis C carrier, please pass on this information to the doctor so they can organise appropriate follow-up blood tests for you.

If the client involved in the contamination incident is known to be HIV positive you should attend the Accident and Emergency Department without delay (preferably within the hour) explaining clearly to the receptionist/triage nurse what has happened so you can be seen as priority. This is to enable a rapid risk assessment to be done and to decide whether there is an indication for offering you post-exposure prophylaxis. This is likely to be most effective if given as quickly as possible after the exposure hence the need for prompt assessment.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS

## SECTION F – DECONTAMINATION OF EQUIPMENT

### F1. Introduction

The aim of decontaminating equipment is to prevent potentially pathogenic organisms reaching a susceptible host in sufficient numbers to cause infection.

Certain items are classified as single-use only. These items must **never** be re-used. If in doubt, refer to the manufacturer's recommendations.

Re-usable equipment should be appropriately decontaminated between each patient using a risk assessment model. Use only the method advised by the manufacturer - using any other process may invalidate warranties and transfer liability from the manufacturer to the person using or authorising the process. If you have any doubts about the manufacturer's recommendations, seek further advice.

The Department of Health and Medical & Healthcare Products Regulations Agency (MHRA) defines the following terms:

- Cleaning is a process 'which physically removes contamination but does not necessarily destroy micro-organisms.' The reduction of microbial contamination cannot be defined and will depend upon many factors including the efficiency of the cleaning process and the initial bio-burden (amount of contamination).

Cleaning is an essential prerequisite of equipment decontamination to ensure effective disinfection or sterilisation can subsequently be carried out;

- Disinfection 'is a process used to reduce the number of viable micro-organisms, which may not necessarily inactivate some viruses and bacterial spores.' Disinfection will not achieve the same reduction in microbial contamination levels as sterilisation;
- Sterilisation 'is a process used to render the object free from viable micro-organisms, including spores and viruses'.



## **F2. Risk Assessment**

Equipment is categorised according to the risk that particular procedures pose to clients - by assessing the microbial status of the body area being manipulated during the procedure. For example, items that come into contact with intact mucous membranes are classified as intermediate risk and require disinfection between each use as a minimum standard. Items that enter normally sterile body areas, or come into contact with broken mucous membranes, are classified as high risk and must be sterile before use.

### **F2.1. Risk Assessment for Decontamination of Equipment**

<b>Risk</b>	<b>Application of Item</b>	<b>Minimum Standard</b>
Low	<ul style="list-style-type: none"><li>• In contact with intact skin</li><li>or</li><li>Not in contact with patient e.g. furniture, surfaces</li></ul>	Clean
Intermediate	<ul style="list-style-type: none"><li>• In contact with intact mucous membranes</li><li>or</li><li>• Contaminated with virulent or readily transmissible organisms (body fluids)</li><li>or</li><li>• Prior to use on immuno-compromised clients</li></ul>	Disinfect or single-use
High	<ul style="list-style-type: none"><li>• In contact with a break in the skin or mucous membrane</li><li>or</li><li>• For introduction into sterile body areas</li></ul>	Sterilise, or single-use

Adapted from Medical Devices Agency, Part 2 (1996) now MHRA

### **F3. Cleaning Methods**

Cleaning is the first step in the decontamination process. It must be carried out before disinfection and sterilisation to make these processes effective. Thorough cleaning is extremely important in reducing the possible transmission of all micro-organisms, including the abnormal prion protein that causes vCJD.

Thorough cleaning with detergent and warm water - maximum temperature 35°C - will remove many micro-organisms. Hot water should not be used as it may coagulate protein making it more difficult to remove from the equipment.

Mechanical cleaning using a washer/disinfector or ultrasonic bath is recommended.

Manual cleaning must be undertaken in a designated sink which is deep enough to completely immerse the items to be cleaned. Scrubbing can generate aerosols, which may convey infective agents. Therefore if scrubbing is necessary, it must be carried out with a brush beneath the surface of the water.

Personal protective equipment, including aprons, gloves and goggles or visors, must be readily available for staff.

Cleaning equipment - such as brushes, cloths and ultrasonic washers - must be stored clean and dry between uses. Use single-use, non-shedding cloths rather than re-usable cloths. Do not store brushes in disinfectant solutions. Brushes should be disposable or changed at least weekly.

After cleaning and thorough rinsing, the items should be dried using a disposable non-shedding absorbent cloth.

Ultrasonic cleaning baths:

- Ultrasonic cleaners must be used in accordance with manufacturer's instructions and HTM 01:01: Decontamination of Re-usable Medical Devices (2009);
- The lid must be on when operated to avoid dispersal of aerosols;
- Ultrasonic cleaners are not suitable for plastic or similar materials;
- Check with the manufacturer that the washer is suitable for the items to be cleaned. Hinged items should be opened before loading in the washer;
- Remove gross contamination and soiling from instruments before loading by cleaning manually (see Manual Cleaning above);
- A low foaming surfactant or detergent should be used in the washer;
- Fill with clean water and the volume of detergent prior to use;

- Bring up to the operating temperature and operate for at least 5 minutes to de-gas the solution;
- After de-gassing, load the washer and replace the lid;
- Empty the tank after 4 hours, or when visibly soiled, or at the end of the session, whichever is soonest. Clean and dry;
- Service regularly and document, including repairs;
- Cannulated instruments can be used in ultrasonic cleaners but must be flushed or brushed with cleaning solution.

## F4. Disinfection Methods

Disinfection methods apply to handwashing, skin preparation and equipment. Disinfection of equipment should be limited and, where possible, disposable or autoclaved equipment used instead. If disinfection is required, use the method recommended by the manufacturer. The table below outlines the advantages, disadvantages and uses of some of the more popular disinfectants.

Chemical	Advantages	Disadvantages	Uses
Chlorine-based: Hypochlorites (e.g. Domestos, household bleach, Milton) NB Undiluted commercial hypochlorite usually contains approx. 100,000ppm available chlorine	<ul style="list-style-type: none"> <li>• wide range of bactericidal, virucidal, sporicidal and fungicidal activity</li> <li>• rapid action</li> <li>• non-toxic in low concentrations</li> <li>• cheap</li> </ul>	<ul style="list-style-type: none"> <li>• inactivated by organic matter</li> <li>• corrosive to metals</li> <li>• diluted solutions can be unstable</li> <li>• need to be freshly prepared</li> <li>• does not penetrate organic matter</li> <li>• bleaches fabrics</li> <li>• needs ventilation</li> </ul>	can be used on hard surfaces and for body fluid spills
Sodium Dichloroisocyanurates (NaDCC) e.g. Presept, Haz-Tab, Sanichlor	<ul style="list-style-type: none"> <li>• slightly more resistant to inactivation by organic matter</li> <li>• slightly less corrosive</li> <li>• more convenient</li> <li>• long shelf-life</li> </ul>	<b>as above</b>	as above
Alcohol 70% e.g. isopropanol	<ul style="list-style-type: none"> <li>• good bactericidal, fungicidal and virucidal activity</li> <li>• rapid action</li> <li>• leaves surfaces dry</li> <li>• non-corrosive</li> </ul>	<ul style="list-style-type: none"> <li>• non-sporicidal</li> <li>• flammable</li> <li>• does not penetrate organic matter</li> <li>• requires evaporation time</li> </ul>	can be used on hard surfaces, or for skin and hand decontamination
Chlorhexidine e.g. Hibiscrub, Chlorhexidine wound cleaning sachets	<ul style="list-style-type: none"> <li>• most useful as disinfectants for skin</li> <li>• good fungicidal activity</li> <li>• low toxicity and irritancy</li> </ul>	<ul style="list-style-type: none"> <li>• limited activity against viruses</li> <li>• no activity against bacterial spores</li> <li>• inactivated by organic matter</li> </ul>	for skin and hand decontamination

## **F5. Sterilisation Methods**

You can obtain sterile instruments by:

- **Purchasing pre-sterilised single-use items**  
These avoid the need for re-sterilisation and are a practical and safe method. You must store items using a stock rotation system according to manufacturer's instructions. Do not use after the expiry date;
- **Tattooists may sterilise their own equipment using a benchtop steam steriliser/vacuum steam steriliser**  
Increasingly, providers are required to comply with a number of quality assurance standards, outlined in the following pages of this document.

### **F5.1. Sterilisation of Instruments – Responsibilities**

If sterilisation is to be carried out, then management and other personnel are required to ensure that the sterilisers are operated safely and effectively and in compliance with legislation and standards. This is dependent on training and a sound general knowledge of the principles of sterilisation.

The key responsibilities of management can be summarised as follows:

- To ensure that sterilisation is carried out in compliance with the law
- To ensure all personnel connected with sterilisation, including any contractors, are suitably qualified and trained for their responsibilities
- To ensure that purchased sterilisers conform to legal requirements, the minimum specifications set out in British and European standards and any additional requirements of the UK health departments
- To ensure that sterilisers are installed correctly and safely with regard to proper functioning, safety of personnel and environmental protection
- To ensure that newly installed sterilisers are subject to a documented scheme of validation comprising installation checks and tests, commissioning and performance qualification tests before they are put into service
- To ensure that sterilisers are subject to a documented scheme of prevention maintenance
- To ensure that sterilisers are subject to a documented scheme of periodic tests at yearly, quarterly, weekly and daily intervals

- To ensure that procedures for production, quality control and safe working are documented and adhered to in the light of statutory requirements and accepted best practice
- To ensure that procedures for dealing with malfunctions, accidents and dangerous occurrences are documented and adhered to
- To ensure that there is a procedure for the de-commissioning of unsafe units and removing from service
- To ensure the vessel is insured as a pressure vessel according to the Pressure Systems Safety Regulations 2000 (PSSR).

## **F5.2. Installation and Validation**

MDA 2002(06) contains detailed guidance on purchase, operation and maintenance of benchtop steam sterilisers. HTM 01-01 Decontamination of Re-usable Medical Devices (previously HTM 2010 contains Department of Health advice on installation, maintenance and operation. After installation the steriliser must be validated prior to use.

Validation is a documented procedure for obtaining, recording and interpreting data required to show that a process will consistently comply with predetermined specifications. The process of validation consists of performance qualification. All records of the validation process should be retained by the owner for inspection.

Following validation a schedule for periodic testing and planned preventative maintenance should be drawn up.

An appropriately qualified person (Authorised Person) should carry out validation of the steriliser. This will probably be the person who also conducts the required periodic testing and maintenance. The manufacturer's programme of planned maintenance should be used. If no manufacturer's programme is available then advice should be sought from an appropriately qualified maintenance engineer.

## **F5.3. Periodic Testing of Benchtop High Temperature Steam Sterilisers**

**Failure to carry out periodic tests and maintenance tasks could compromise safety and may have legal and insurance implications for the user or owner of the steriliser.**

Sterilisation is a process whose efficiency cannot be verified retrospectively by inspection or testing of the product. Routine monitoring of the process, combined with periodic testing of the steriliser's performance, is therefore needed to give assurance that sterilising conditions are consistently being achieved.

A daily, weekly, quarterly and yearly testing schedule is required.

Each steriliser should have a log book in which details of maintenance, tests, faults and modifications are recorded.

### **F5.3.1. Daily Testing**

The owner/user is responsible for daily testing. These tests are designed to show that the operating cycle functions are correctly shown by the values of the cycle variables indicated and recorded by the instruments fitted to the steriliser.

#### **Procedures for Daily Testing**

1. A normal cycle is operated with the chamber empty except for the usual chamber “furniture” (e.g. trays, shelves, etc.).
2. A record should be made in the log book of the elapsed time and indicated temperature and pressure (the values shown on the dials or other visual displays fitted to the steriliser) at all significant points of the operating cycle – the beginning and end of each stage or sub-stage, and the maximum temperature and pressure values attained during the holding time.
3. If the steriliser is fitted with a temperature and pressure recorder, the printout should be compared with the records in the steriliser log book and retained for future inspection.

The test can be considered satisfactory if all the following apply:

- A visual display of “cycle complete” is indicated:
  - The value of the cycle variables are within the limits established by the manufacturer as giving satisfactory results
- The steriliser hold time is not less than that specified in Table 1:
  - The temperatures during the hold time are within the appropriate temperature range specified in Table 1
- The door cannot be opened until the cycle is complete
- No mechanical or other anomaly is observed
- If the steriliser is fitted with a temperature and pressure recorder, then during the plateau period:
  - the indicated and recorded chamber temperatures are within the appropriate sterilisation temperature range
  - the difference between the indicated and recorded temperatures does not exceed 2°C

- the difference between the indicated and recorded pressure does not exceed 0.1 bar.

**Table 1 – Steam sterilisation temperature ranges and holding times for sterilisers with high temperature steam (HTM 20:10)**

<b>Sterilisation Temperature (°C)</b>	<b>Maximum Allowable Temperature (°C)</b>	<b>Minimum Hold (min)</b>
134	137	3
126	129	10
121	124	15

The preferred sterilisation temperature is 134°C. However, any of the lower sterilisation temperature bands in Table 1 may be used where load items would be damaged at 134°C (HTM 2010-Part 4 and 6)

#### **F5.3.2. Weekly Testing**

- Examine the door seal, check security and performance of door safety devices;
- Check that safety valves, or other pressure limiting devices, are free to operate.

#### **F5.3.3. Quarterly and Annual Checks**

A suitably qualified person, officially referred to as the Authorised Person, should conduct these tests as they require the use of specialised equipment and will probably be conducted by the person who undertakes the maintenance. Guidance on these tests is contained in HTM 2010-Part 4 and 6 (1997).

#### **F5.3.4. Technical Aspects and Safety Considerations**

1. Steam sterilisation is dependent on direct contact between the load material and saturated steam under pressure, at one of the temperatures shown in Table 1, in the absence of air.
2. Benchtop steam sterilisers achieve the above conditions by electrically heating water (usually sterile water for irrigation, but manufacturers may recommend purified) within the chamber to produce steam at the required pressure and temperature, with air being passively displaced from the chamber by steam.
3. During the sterilising cycle the steriliser door must prevent access to the chamber whilst it is under pressure. The door should not be able to be opened until the “cycle complete” signal is indicated.



## **F6. Maintenance of Sterilisers**

### **Record sheet**

#### **Unwrapped Instrument Steriliser**

Daily weekly record

**Clinic:**

**Week Commencing:**

**Machine reference number:**

Warm up cycle completed?

YES/NO

<b>Daily Test Results</b>	<b>Mon</b>	<b>Tues</b>	<b>Wed</b>	<b>Thurs</b>	<b>Fri</b>	<b>Sat</b>
<b>Cycle counter number</b>						
Cycle start time						
Time to attain temp.						
Pressure gauge reading						
Temp. gauge reading						
Time at 134°C (min 3 mins)						
Total cycle time						
Initial of authorised user						

Note: in the event of a malfunction notify the engineer at once.

Comments:

## **F7. Use of Displacement Benchtop Steam Autoclaves**

### **British Standard 3970**

Autoclaves vary in sophistication, and it is essential that the downward displacement benchtop steriliser be to an acceptable standard, such as BS 3970 and C E Standards.

### **Maintenance**

Regular maintenance is advised to ensure the monitoring equipment is functioning correctly (refer to previous pages).

### **Temperatures and Pressures**

Each autoclave should include temperature and pressure-indicating equipment, a cycle stage indicator and a fault and cycle complete indicator. Temperatures and pressures achieved should be observed each time it is used, and documented at least once for each day that it is used (refer to previous pages) unless the autoclave comes with an inbuilt printer. Retain records for 11 years.

### **Solutions**

Only use sterile, distilled, de-ionised water or water for irrigation in sterilisers as per manufacturer's guidance. Reservoirs should be emptied and cleaned as per manufacturer's recommendation daily.

### **Protective Clothing**

The use of protective clothing is recommended when handling or dealing with blood and/or body fluids. As tattooing and similar instruments will have been contaminated with blood and body fluids, and whilst the action of cleaning such instruments may give rise to splashing with these fluids, disposable latex gloves, disposable aprons and eye protection should be worn.

### **Pre-cleaning**

The physical cleaning of instruments is a pre-requisite to sterilisation as this will ensure all surfaces are free of debris and able to be completely sterilised. Hot soapy water is recognised as the most thorough and cost-effective means for physical cleaning. A better alternative is an ultrasonic cleaner (see cleaning methods under Section F3).

## Scrubbing Brushes

Whilst the use of scrubbing brushes is generally not advocated, it may prove impossible to effectively clean instruments without them. Therefore if they are used it is suggested they are either single-use or they are themselves sterilised after use and changed at least weekly.

## Inspection

Prior to sterilisation, items should be checked for both cleanliness and operation i.e. that forceps align, the handle grip is firm, joints move freely and are not loose, instruments are not rusted, etc.

## Loading the Machine

When loading instruments into the steriliser, ensure they are dry and not touching. Place bowls and receivers on edge and leave hinged instruments open. Do not overload machine.

## Unwrapped Instruments

A displacement steam autoclave should be used for unwrapped instruments. It is essential that instruments are sterilised unwrapped (unless a specific vacuum-assisted porous load autoclave is used). If instruments are wrapped prior to sterilisation in the benchtop displacement steam autoclave, there is no guarantee that the instruments inside the wrapping will be sterilised. It is equally important to ensure that the steam can reach all surfaces of the instruments, i.e. they do not overlap or touch when loaded into the autoclave.

**Hollow-lumen items will not be effectively sterilised in a displacement autoclave. If hollow-lumen instruments, or other instruments, require wrapping, a vacuum autoclave should be used.**

## Use of Instruments

Instruments should be used immediately after sterilisation (up to 3 hours after the cycle is finished when the door remains shut), as no adequate method exists to store and also maintain sterility when instruments have been sterilised unwrapped.

For non-invasive procedures store instruments in a clean, dry and dust-free place, preferably a drawer or covered box.

## Training

Training of staff to use the equipment correctly is an essential part of ensuring a safe procedure. No staff should be expected to use such equipment, or be involved in the sterilisation procedure, unless a clear understanding is first ensured.

## Single-use Equipment

**Single-use** means that the manufacturer:

- Intends the item to be used once, then thrown away
- Considers the item unsuitable for use on more than one occasion
- Has insufficient evidence to confirm that re-use would be safe.

**Single client use** means that the item can be reused if re-processed using an appropriate method and is used on the **same client only**. The duration of use is dependent upon undertaking a risk assessment of individual risk factors.

The MDA (1995) guidance suggests that reprocessing and re-using such items may pose hazards for clients and staff, if the reprocessing method has not been validated. Therefore re-use of single-use products is not advisable unless the outcomes have been taken into account. The Consumer Protection Act 1987 will hold a person liable if a single-use item is re-used against the manufacturer's recommendations.



SINGLE-USE ONLY  
DO NOT RE-USE

### **F8. Decontamination Equipment Prior to Inspection, Service, Repair or Loan**

Do not send contaminated equipment off-site without decontaminating first. Before dispatch, complete and attach a certificate which states the method of decontamination used, or the reason why it was not possible (NHS Management Executive 1993). Equipment that is impossible to decontaminate is likely to be complex, high technology and heat-sensitive. Often it cannot be decontaminated without being dismantled by an engineer - in this case attach a bio-hazard label to the item. Complete the clearance certificate and advise staff on protective measures.

A proforma of such a certificate is available below and can be photocopied for use by operators.

## DOCUMENTATION

A completed clearance certificate must be attached to the equipment prior to work being carried out. A suggested letter is:

From:

-----  
-----  
-----  
-----

To:

-----  
-----  
-----  
-----

Make and description of equipment item:

-----

Model/Serial/Batch Number:

-----

Other distinguishing marks:

-----

This equipment/ item has not been in contact with blood or other body fluids. It has been cleaned in preparation for inspection, servicing or repair.

This equipment has been decontaminated. The method used was

-----

This equipment could not be decontaminated. The nature of risk and safety precautions to be adopted are:

-----

Signed

Date

Position

Address

# **ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS**

## **SECTION G – DECONTAMINATION OF THE ENVIRONMENT**

### **G1. Cleaning Methods**

The environment plays a relatively minor role in transmitting infection, but dust, dirt and liquid residues will increase the risk. They should be kept to a minimum by regular cleaning and by good design features in buildings, fittings and fixtures.

A written cleaning schedule should be devised specifying the persons responsible for cleaning, the frequency of cleaning and methods to be used and the expected outcomes:

- Work surfaces and floors should be smooth-finished, intact, durable, of good quality, washable and should not allow pooling of liquids and be impervious to fluids;
- Carpets are not recommended in areas where tattooing/body piercing procedures will take place because of the risk of body fluid spills;
- Where carpets are in place, there should be procedures or contracts for regular steam cleaning and dealing with spills;
- Keep mops and buckets clean, dry and store inverted;
- Mop head should be removable for frequent laundering and replaced at least weekly, or single-use if this is not possible;
- Provide single-use, non-shedding cloths or paper roll for cleaning;
- Keep equipment and materials used for general cleaning separate from those used for cleaning up body fluids;
- Colour-code cleaning equipment, such as mop heads, gloves and cloths for toilets, kitchens and clinical areas. Use different colours for each area;
- Use general-purpose detergent (GPD) for environmental cleaning - follow the manufacturer's instructions.

<b>DOMESTIC</b>	<b>CLEANING</b>
Bucket (plastic)	Empty contents down toilet. Rinse with hypochlorite solution and dry.
Mop (wet)	Rinse, dry and store head up after use; heat disinfect in washing machine and dry thoroughly. Replace at least weekly. Disposable mop heads can be used. Dispose of mop heads if heavily soiled.
Mop (dry)	Vacuum after each use.
Lavatory brushes	Rinse in flushing water and store dry. Replace regularly.
Suggested colour coding of cleaning equipment	See colour-code for hygiene table (Section G2).
Floors	Dust control - dry mop. Wet cleaning - wet mop, wash with hot water and GPD. If known contamination - follow with hypochlorite 1000 ppm.
Furniture and fittings	Damp dust with hot water and detergent. If known contamination - follow with hypochlorite 1000 ppm.
Walls and ceilings	These are not usually an infection issue. When visibly soiled use hot water and detergent to spot clean. Splashes of blood, urine or known contaminated material should be cleaned promptly with hypochlorite solution.

## G2. Colour-Code for Hygiene

Based on the National Colour-coding System for the NHS (NPSA 2007)

### National Colour Coding Scheme



**THE GOLDEN RULE: WORK FROM THE CLEANEST AREA TOWARD THE DIRTIEST AREA. THIS GREATLY REDUCES THE RISK OF CROSS-CONTAMINATION.**

1. The aim of a colour-coding system is to prevent cross-contamination
2. It is vital that such a system forms part of any employee induction or continuous training programme
3. A minority of people are colour blind in one or more colours. Some individuals may not know this and colour identification testing should form part of any induction training
4. The colour-coding system must relate to all cleaning equipment, cloths and gloves.

Monitoring of the system and control of colour-coded disposable items against new stock release is extremely important.

Note: Not all of the colours are applicable to the tattooist environment, such as yellow for isolation facilities. The principle of the colour coding can, however, still be applied in those premises.



# **ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS**

## **SECTION H – WASTE MANAGEMENT**

### **H1. Responsibility**

All organisations have a legal responsibility to dispose of waste safely, ensuring no harm is caused either to staff, members of the public or the environment. This responsibility begins when waste is generated and ends with its final disposal - even where properly authorised agents are used.

It is essential that persons handling waste exercise care to prevent injury or transmission of infection to themselves or others. This is to fulfil their responsibilities under the current legislation (for list see end of this Section).

### **H2. Introduction**

Good waste management is important to:

- Reduce the health and safety risk to staff, patients and visitors;
- Protect the environment;
- Reduce waste disposal costs.

Waste legislation in England has been updated in line with that in Europe. The old clinical waste classification system using groups A to E can no longer be used, as the groups do not reflect the appropriate segregation for treatment or disposal.

These guidelines should be read in conjunction with Waste Management 2 (WM2), the European Waste Catalogue and the Department of Health's Environment and Sustainability – Health Technical Memorandum 07-01: (2006) Safe management of Healthcare waste available at:

[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_063274](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_063274)

Waste regulation requires the classification of waste on the basis of hazard characteristics and point of production. Examples are given in Figure 1 below.

**Figure 1**

<b>Hazardous waste</b>	<b>Non-hazardous waste</b>
Infectious waste (see below)	Domestic waste (black-bag or municipal waste)
Fluorescent tubes	Food waste
Laboratory chemicals	Offensive/hygiene waste
Cleaning chemicals	Packaging waste
Oils	Furniture

Each tattooist, body piercer or acupuncturist should have a Waste Policy. The operator is responsible for ensuring that contracts are in place for collection and safe disposal of hazardous waste from the premises. Consultation with the waste management provider is essential to ensure appropriate documentation is generated when necessary i.e. consignment notes. The Operator is also responsible for monitoring the performance of their staff and waste contractors.

### **H3. Definition of Healthcare Waste**

#### **H3.1. Clinical Waste**

The Controlled Waste Regulations define clinical waste as:

- (a) Any waste which consists wholly or partly of human or animal tissue blood or other bodily fluids, excretions, drugs or other pharmaceutical products, swabs or dressings, syringes, needles or other sharp instruments, being waste which unless rendered safe may prove hazardous to any person coming into contact with it;
- and
- (b) Any other waste arising from medical, nursing, dental, veterinary, pharmaceutical or similar practice, investigation, treatment, care, teaching or research, or the collection of blood for transfusion, being waste which may cause infection to any person coming into contact with it."

Broadly, clinical waste can be divided into two categories of materials:

- Waste which poses a risk of infection
- Medicinal waste.

### H3.2. Infectious Waste

The Hazardous Waste Regulations define Infectious Waste as:

'Infectious Substances containing viable micro-organisms or their toxins which are known or reliably believed to cause disease in man or other living organisms'. Infectious waste is traditionally known as "**clinical waste**".

### H3.3. Medicinal Waste

Medicinal waste can be classified into two categories:

- (a) Cytotoxic and cytostatic medicines (Classified as Hazardous Waste)
- (b) Medicines other.

Failure to segregate cytotoxic and/or cytostatic medicines from other medicines will mean that the entire medicinal waste stream will need to be classified as hazardous.

Cytotoxic and cytostatic classifications can be found in the National Institute of Occupational Safety and Health (NIOSH) Alert - <http://www.cdc.gov/niosh/docs/2004-165/pdfs/2004-165.pdf> or the British National Formulary (BNF).

### H3.4. Offensive/Hygiene Waste

Non-infectious waste (human waste and sanitary protection waste such as nappies, incontinence and sanitary pads etc,) which does not require specialist treatment or disposal, but which may cause offence to those coming into contact with it.

## H4. Waste Segregation

Segregation of waste at the point of production into suitable colour-coded packaging is vital to good waste management. Figures 2 and 3 outline the colour-coding of bags and sharps bins for different types of waste.

See: Health Technical Memorandum 07-01: Safe Management of Healthcare Waste section 7 for full details of colour-code tables, available at: [http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_063274](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_063274)

Yellow bags will only be used in "high-risk" settings such as an infectious diseases hospital/ward.

#### H4.1. Colour-coding key to segregation system



Colour	Description
 Orange	<i>Waste which may be “treated”</i> Indicative treatments/disposal required to be “rendered safe” in a suitable permitted or licensed facility. <i>Usually alternative treatment plants (ATPs). However this waste may also be disposed of by incineration.</i>
 Black	<i>Domestic (Municipal) Waste</i> Minimum treatments/disposal required is landfill in a suitable permitted or licensed site. Recyclable components should be removed through segregation. Clear/opaque receptacles may also be used for domestic waste.

Figure 2 - Table from HTM07-01: Safe management of healthcare waste.

#### H4.2. Waste Packaging and Colour-coding


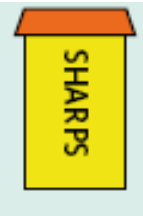

Waste receptacle	Waste type	Example contents	Treatment / disposal
	Infectious waste, potentially infectious waste and autoclaved laboratory waste	Soiled dressings i.e. bandages, plastic single-use instruments	Licensed/ permitted treatment facility Needs to be treated to render safe
	Sharps not contaminated with medicinal waste	Tattoo needles	Suitably authorised incineration or alternative treatment facility
	Domestic waste	General refuse, including packaging, confectionery products, flowers	Landfill

Figure 3 - Table adapted from HTM07-01: Safe management of healthcare waste.

## H5. General Principles for Handling of Waste

- Waste should be segregated at the point of origin
- Personal protective clothing should be worn when handling waste
- Waste should be:
  - Correctly bagged in appropriate colour-coded bags which must be UN-approved and comply with BS EN ISO 7765:2004 and BS EN ISO 6383:2004
  - Double bagged where:
    - The exterior of the bag is contaminated
    - The original bag is split, damaged or leaking
  - Kept in a rigid-sided, fire-retardant holder or container with a foot-operated lid, and, so far as is reasonably practicable, out of the reach of children
  - Only filled to  $\frac{3}{4}$  full at the end of the day or as recommended by manufacturers
  - Securely sealed and labelled with coded tags at the point of use to identify their source.
- Waste should not be:
  - Decanted into other bags, regardless of volume
  - Contaminated on the outside
  - Re-used
  - Sharps must be disposed of into approved sharps containers which meet the BS 7320/UN 3291 standards
  - Sharps containers should **NEVER** be placed into any waste bag.

### H5.1. Disposal of Sharps

Fully discharged syringes, needles, razors, ampoules and other sharps should always be placed in an appropriate sharps container. These items should never be placed in a waste bag of any kind.

Care should be taken to ensure that sharps containers are correctly assembled according to the manufacturer's instructions.

Use the appropriately sized sharps container to prevent used sharps being stored for long periods of time.

Sharps containers must be sealed, labelled with the point of origin and placed in the designated clinical waste collection point when  $\frac{3}{4}$  full.

Sharps containers should conform to the BS 7230/UN 3291 standards.

## **H5.2. Disposal of Aerosol Cans/Glass/Bottles/Broken Crockery/Dry Cell Batteries**

These must never be placed in any waste bag, especially a yellow clinical waste bag which is destined to be incinerated.

These items should always be placed in a designated cardboard box, lined with a plastic bag to render it leak-proof. The box should be labelled to indicate its contents and method of disposal.

<h2><b>H6. Storage of Waste</b></h2>
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Hazardous waste should be removed from point of generation as frequently as circumstances demand, and at least weekly.

Between collections, waste should be:

- Stored in correctly coded bags, with bags of each colour-code kept separate
- Situated in a centrally designated area of adequate size related to the frequency of collection
- Sited on a well-drained, impervious hard-standing floor, which is provided with wash-down facilities
- Kept secure from unauthorised persons, entry by animals and free from infestations
- Accessible to collection vehicles.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS

## SECTION I – GENERAL STANDARD PROCEDURES

### I1. Before Treatment

The work area should be prepared in such a way so as to avoid having to leave the client in the middle of a procedure to get something which may be needed.

Ensure that the work area is clean and tidy.

Ensure that all items needed are within easy reach and that any items not required are removed from the immediate area.

Place a container labelled 'Dirty Instruments for Sterilising' in the work area for the collection of instruments.

Disposable tissues should be available for handling telephones, switches etc. during the procedure.

Prepare a new skin-cleaning spray daily according to the manufacturer's instructions.

Spray bottles should be covered in a good-grade plastic bag to protect the bottle from contamination. The bag should be changed between each client.

Hands must be washed thoroughly prior to the procedure and disposable gloves worn.

Packages containing sterile needles should be checked for damage and date.

**WRITTEN SIGNED CONSENT** must be obtained from the client **PRIOR** to procedure.

**VERBAL AND WRITTEN INSTRUCTIONS ON THE AFTER CARE** of the tattoo and/or piercing site must be given.

Antibiotic or antiseptic creams should not be used without medical advice.

## **12. After Treatment**

Place all dirty instruments into the container marked 'Dirty Instruments' for removal to cleaning area. Pre-clean any re-usable instruments in the sink with hot soapy water. Re-usable instruments should then be placed into the ultrasonic cleaner and sterilised in the autoclave prior to re-use.

Wash and dry all equipment before autoclaving.

The operator should discard all needles into a sharps container immediately following use.

Dispose of all single-use items (spatula, pigment caps and tray, used tissues, wipes and paper towels etc.) into the yellow/orange waste bag.

Clean containers used for collecting dirty instruments with GPD and hot water. Store dry.

Change paper towel on couch/chair - wipe down if soiled and at the end of each session.

Remove gloves and disposable aprons and discard in the clinical waste bag.

Change bags around spray bottle and tattoo machine.

Wash, rinse and dry hands thoroughly.

### **Choice of Instruments, Needles and Jewellery**

Pre-sterilised, single-use, disposable needles should be used in body piercing and acupuncture. Pre-sterilised single-use tattooing needles should be used in tattooing. Under no circumstances should any item marked as single-use by its manufacturer be cleaned and sterilised for re-use on another client.

Other instruments that have penetrated the skin or are contaminated with blood must be properly cleaned and sterilised before further use.

The jewellery used in body piercing should be either surgical grade stainless steel with very low nickel content or 14-18 carat gold. Once the piercing site has completely healed, jewellery may be changed for different metals if required.



# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS

## SECTION J – AUDIT TOOL

Answer Yes or No. Please tick a box for all questions

STANDARD 1	HAND HYGIENE	Yes	No
1.	Wash hand basin is available		
2.	Liquid soap dispenser is located near wash hand basins		
3.	Paper towels dispenser at all sinks in procedure areas and wash hand basin within operating room		
4.	Sinks are visibly clean		
5.	Sinks are free from nailbrushes		
6.	Hot and cold water is available at sinks (preferably via mixer taps with elbow or foot operation)		
7.	Wash hand basin and sinks in procedure areas are free from tea cups and drinking facilities		
8.	Access to wash hand basin is clear e.g. no equipment soaking in sink		
9.	There is a foot-operated bin for waste towels in close proximity to handwashing sinks		
10.	Is this bin operational?		
11.	Is there a handwashing poster on display by handwashing area(s)?		
12.	Are there toilet facilities for staff with separate handwashing facilities?		

13.	There is a separate sink and area for cleaning instruments		
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**Comments:**

<b>STANDARD 2</b>	<b>PROTECTIVE CLOTHING</b>
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**The following protective clothing is available for use:**

		<b>Yes</b>	<b>No</b>	<b>N/A</b>
1.	Non-sterile latex/vinyl/nitrile gloves (non-powdered)			
2.	Disposable plastic aprons			
3.	Clean protective over-clothing that is changed daily (if plastic aprons not used)			
4.	Eye goggles or face shields available where risk assessment indicates their use			

**Comments:**

<b>STANDARD 3</b>	<b>BODY FLUID SPILLAGE</b>
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		<b>Yes</b>	<b>No</b>	<b>N/A</b>
1.	Paper towels and appropriate disinfectant (e.g. bleach) is available for cleaning up body fluid spillage			
2.	Operators are aware of the procedure for dealing with body fluid spillage			

**Comments:**

<b>STANDARD 4</b>	<b>MAINTENANCE OF THE ENVIRONMENT</b>
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		<b>Yes</b>	<b>No</b>
1.	All general areas are clean and uncluttered		
2.	There is a documented, regular cleaning programme in operation		
3.	There is no carpet in procedure area(s)		
4.	Sufficient surface for procedure and suitable layout of clean and dirty procedure fields		
5.	Procedure areas are clean and free from extraneous items		
6.	All sterile products are appropriately stored above floor level		
7.	Client couches/chairs/floors in the procedure areas have wipeable surfaces		
8.	Client couches/chairs in the procedure areas are in a good state of repair		
9.	Disposable paper is used to protect the couches/chairs in the procedure area(s)		
10.	Mops are stored dry and inverted		
11.	Buckets are clean, dry and inverted after use		
12.	Cleaning cloths are either single-use or non-shedding and washed with hot soapy water and left hung to dry after use		
13.	Modesty cover blankets are laundered, (change daily and when contaminated)		
14.	Surface joints and seals (e.g. sinks, worktop edges to wall) are free from mould		

**Comments:**

<b>STANDARD 5</b>	<b>USE OF DETERGENTS/DISINFECTANTS AND ANTISEPTICS</b>
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		<b>Yes</b>	<b>No</b>
1.	Disinfectants are used at the correct dilution and appropriately		
2.	Chemical disinfectants are used as per manufacturer's recommendations for non-autoclavable equipment (e.g. tattoo gun motors)		
3.	A deep sink is available for washing items separate to handwashing facilities		
4.	Data sheets are available on hazardous products for risk assessment and safe working methods		
5.	Environmental surfaces are cleaned appropriately between clients		
6.	Environmental surfaces are protected with disposable paper sheets between clients		

**Comments:**

<b>STANDARD 6</b>	<b>PROCEDURES</b>
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		<b>Yes</b>	<b>No</b>
1.	Single-use sterile dressings are applied following tattooing		
2.	Disposable single-use razors are used to shave clients prior to procedure		
3.	Multiple-use items are not used for clients e.g. marking pens, deodorant sticks, petroleum containers, skin cream tubes		
4.	Verbal and printed after-care information on tattooing/piercing available for clients to take away		
5.	Clients receive an explanation about the procedure and are asked to sign a consent form		
6.	Details of clients are kept including name, address, age, proof of ID and part of body tattooed/pierced		

**Comments:**

**STANDARD 7****DECONTAMINATION OF EQUIPMENT**

Indicate method of sterilisation used in the practice:

Front Loading Benchtop Autoclave e.g. Little Sister

Top Loading Benchtop Autoclave e.g. Prestige

Other (Details) \_\_\_\_\_

Vacuum

**Non vacuum**

		Yes	No
1.	There is no evidence of single-use equipment being re-used		
2.	Sterilising equipment is clean and in a good state of repair		
3.	Evidence from records Sterilising equipment is maintained on a quality maintenance programme (in accordance with HTM 2010 and HTM 07-01)		
4.	Evidence from records Sterilising equipment cycle checked and recorded daily		
5.	Sterilising equipment is checked weekly (in accordance with HTM 2010)		
6.	There is a contract for the maintenance and service of the sterilising equipment. Name of service company: _____		
7.	Air temperature, pressure and holding times are recorded for all cycles (or printout available)		
8.	Water drained daily from steriliser		
9.	Instruments are unwrapped and not in pouches (unless vacuum autoclaved)		

10.	Sterile water used for irrigation, or as recommended by the manufacturer		
11.	Water boilers and glass bead heaters are not used for instruments requiring sterilisation, and UV chambers are not used		
12.	Ultrasonic cleaner is used <u>with</u> a lid <u>and</u> the correct solution <u>and</u> is emptied daily and kept dry overnight		
13.	A detergent is used to clean grossly contaminated equipment before placing in ultrasonic bath		
14.	Items are rinsed after cleaning before placing in the ultrasonic bath and before placing in the autoclave		
15.	Cleaning brushes are disposable or autoclaved after session use in marked container, and changed at least weekly		
16.	Used contaminated equipment is stored safely out of client areas after use		
17.	All sterilised equipment is stored dry and is covered		
18.	Sterile products are stored above floor level		
19.	All sterilised equipment is used within three hours (unless vacuum autoclaved)		
20.	Only trained staff are permitted to use the autoclave		
21.	A system is in place to accommodate breakdown and repair of equipment (autoclaves/ultrasonic cleaning machines etc.)		
22.	Sterile water for irrigation is used with autoclave (or as recommended by manufacturer)		
23.	Dye containers are single-use only and are appropriately disposed of following use		
24.	Sterile disposable needles are single-use only		
25.	If needle bars are re-used they are appropriately sterilised between uses		

**Comments:**



<b>STANDARD 8</b>	<b>WASTE DISPOSAL</b>
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		<b>Yes</b>	<b>No</b>
1.	The operator has written instructions on the safe disposal of waste		
2.	Foot operational waste bins are in working order and lined with a plastic bag in procedure areas		
3.	Appropriate clinical waste bags are used for disposal of clinical waste		
4.	Clinical waste and domestic waste are correctly segregated		
5.	Waste bags are less than $\frac{3}{4}$ full and securely tied		
6.	Clinical waste is stored in a designated area prior to disposal		
7.	The storage area is locked and inaccessible to unauthorised persons and pests		
8.	Bags are labelled with source (Operator's Name) – in accordance with the Duty of Care		
9.	Collection of clinical waste is undertaken at least weekly with a registered company and disposed of appropriately.		
10.	Storage facilities for clinical waste should be lockable e.g. lockable cupboard. The storage area should be marked with a bio-hazard sign		
11.	Waste transfer notes should be kept on site and must identify the waste, type of container, quantity of waste, time and place of transfer and name/address of transferor and transferee		
12.	Protective clothing (e.g. gloves and aprons) are available to staff handling clinical waste		

**Comments:**

<b>STANDARD 9</b>	<b>SHARPS AND NEEDLESTICK INJURY</b>
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		<b>Yes</b>	<b>No</b>
1.	Sharps boxes are available for use		
2.	Sharps boxes conform with the BS7320 and UN3291 standards		
3.	Sharps box is filled to the fill-line or less		
4.	Sharps box is assembled correctly – check lid is secure		
5.	Sharps box is labelled with source business name and address		
6.	Staff are aware of Hepatitis vaccination policy		
7.	Staff are aware of procedure in case of needlestick injury		
8.	Sharps boxes are stored above floor level and safely out of reach of children and visitors		
9.	Sharps boxes are available when any clinical practice involving the use of sharps is in progress		
10.	Operators are vaccinated against Hepatitis B and there is documented proof of this		
11.	Sharps boxes are disposed of via a registered waste carrier		

**Comments:**

<b>STANDARD 10</b>	<b>POLICIES AND RECORDS</b>
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**Are the following policies and records available?**

		<b>Yes</b>	<b>No</b>
1.	Handwashing		
2.	Cleaning policy (inc. frequency rota/protocol)		
3.	Sterilisation and monitoring procedures		
4.	Management of clinical and general waste		
5.	Management of blood spillages		
6.	Use of protective clothing		
7.	Needlestick injury procedure		
8.	Sharps handling/disposal		
9.	COSHH risk assessment/safe use of chemicals		
10.	Training of staff		
11.	Staff health including Hepatitis B status		
12.	The policies are regularly reviewed/up to date (i.e. yearly)		

**Comments:**

## **SUMMARY OF ISSUES RAISED AND ACTION PLAN**

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS

## SECTION K – REFERENCES

### Decontamination

Babb J., (1994) Methods of Cleaning and Disinfection. British Journal of Theatre Nursing 3(10) Jan 12-29.

Bassett WH (1992) Clay's Handbook of Environmental Health. 16<sup>th</sup> Edition. London.

MDA (2002) Benchtop Steam Sterilizers – Guidance on Purchase, Operation and Maintenance. MDA DB 2002(06).

MDA (2000) guidance on the Purchase, Operation and Maintenance of Vacuum benchtop steam sterilisers MDA DB 2000(05)

Department of Health (2009) Health Technical Memorandum 01-01: Decontamination of Re-usable Medical Devices.

PHLS (1993) Chemical Disinfection in Hospitals. London.

DoH (1993)b Sterilisation, Disinfection and Cleaning of Medical Equipment: Guidance on Decontamination from the Microbiology Advisory Committee to DoH, Medical Devices Directorate, Parts 1 & 2 London.

### Handwashing

Gould et al 2000. *Improving hand hygiene in community health settings*. Journal of Clinical Nursing 9-95-102

ICNA (1999) Guidelines for Hand Hygiene. London.

### Health and Safety

Health and Safety Commission (1974). Health and Safety at Work Act. HMSO. London.

Health and Safety Executive (1994). Control of Substances Hazardous to Health Regulations. HMSO. London.

## **Infection Control**

Ayliffe G, Fraise A, Geddes A, Mitchell K, (2000) Control of Hospital Infection – A Practical Handbook. Fourth edition. London

Hawker J, Begg N, Blair I, Reintjes R, Weinberg J (2001) Communicable Disease Control Handbook. London.

Lawrence, J., May, D., (2003) infection Control in the Community. Churchill Livingstone. London.

McCulloch, J. (2000) Infection Control - Science, management and practice. London.

MEERS P, McPherson M, SEDGWICK J (1997) Infection Control in Health Care. 2<sup>nd</sup> edition. Thomas Cheltenham.

NATIONAL INSTITUTE FOR CLINICAL EXCELLENCE (2003) Infection Control – Prevention of healthcare-associated infection in primary and community care.

NPSA (2007) Safer practice notice 15 – Colour-coding hospital cleaning materials and equipment.

Pritchard, A.P., Mallet, J. (Eds) (1992). The Royal Marsden Hospital Manual and Clinical Nursing Procedures, Blackwell, London

Wilson J. 2000 Infection Control in Clinical Practice. Bailliere Tindall London

## **Infectious Diseases**

British Society for Antimicrobial Chemotherapy (1995) Guidelines on the control of methicillin-resistant *Staphylococcus aureus* in the community. Journal of Hospital Infection, 31, 1-12.

Chin J., (2000) Control of Communicable Diseases Manual. 17<sup>th</sup> Edition. Washington

DoH (1998) Guidance for Clinical Health Care Workers: Protection against infection with blood-borne viruses. London

DoH (2000) HIV Post-Exposure Prophylaxis: Guidance from the UK Chief Medical Officers' Expert Advisory Group on AIDs. London

DoH (2006) Immunisation against Infectious Disease (Green Book) ISBN: 0-11-322528-8

Greenwood D, Slack R, Peutherer J. (1992) Medical Microbiology a guide to Microbial Infections: Pathogenesis, Immunity, Laboratory Diagnosis and Control. 14<sup>th</sup> edition. Churchill Livingstone, London

The Scientific Committee on Cosmetic Products and Non-Food Products Intended for Consumers (2003), Risks and Health Effects from Tattoos, Body Piercing and Related Practices SCCNFP/0753/03 available at:

[http://ec.europa.eu/health/ph\\_risk/committees/sccp/documents/out230\\_en.pdf](http://ec.europa.eu/health/ph_risk/committees/sccp/documents/out230_en.pdf)

Ramsey, M.E. (1999) Guidance on the investigation and management of occupational exposure to hepatitis C. Communicable Disease and Public Health. Vol. 2. No. 4. 258-262.

## **Legal framework**

London Local Authorities Act 1991 The Stationery Office

Local Authority Circular 76/2 ([www.hse.gov.uk/lau/lacs/76-2.htm](http://www.hse.gov.uk/lau/lacs/76-2.htm))

Local Authority Circular 14/1 ([www.hse.gov.uk/lau/lacs/14-1.htm](http://www.hse.gov.uk/lau/lacs/14-1.htm))

Tattooing of Minors Act 1969 The Stationery Office

The Prohibition of Female Circumcision Act 1985 The Stationery Office

Local Government (Miscellaneous Provisions Act) 1982 The Stationery Office

Health and Safety at Work Act etc Health and Safety Commission (1974) HSE London

Barbour Index (2001) David Denton Body art, cosmetic therapies and other special treatments. Chadwick House Group Ltd, London

Greater London Council (General Powers) Act 1981.

Management of Health and Safety at Work Regulations 1992.

The Provision and Use of Work Equipment Regulations 1998.

The Supply of Machinery (Safety) (Amended) Regulations 1992 [as amended 2005, and by the Supply of Machinery (Safety) (Amendment) Regulations 1994]

Control of Substances Hazardous to Health 2002

The Medicines Act 1968.

The Medicines (Sales or Supply) (Miscellaneous Provisions) Regulations 1980  
Pressure Systems Safety Regulations 2000.

## **Protective Clothing**

ICNA (1999) Glove Usage Guidelines. London.

ICNA (2002) A Comprehensive Glove Choice. London

ICNA (2002) Protective Clothing – Principles and Guidance

### **Public Health**

DoE (1990) Environmental Protection Act 1990. HMSO. London.

DoH(1961) Public Health Act 1961. HMSO. London.

DoH (1988) The Public Health (Infectious Diseases) Regulations 1988. HMSO. London

### **Sharps**

ICNA (2003) Reducing Sharps Injury – Prevention and risk management. London

### **Single-use**

MDA (2000) Single-use Medical Devices: Implications and Consequences of Reuse. London.

### **Waste**

DoH (2006) HTM07-01: Safe Management of Healthcare Waste.

IWM (2000) Healthcare Waste Management and Minimisation. London

Phillips G (1999) Microbiological Aspects of Clinical Waste. Journal of Hospital Infection 41:1-6

Environment Agency (2003) – Hazardous Waste – Technical Guidance WM2

The National Institute for Occupation Safety and Health (NIOSH) Alert (2004) Preventing Occupational Exposure to Antineoplastic and Other Hazardous Drugs in Healthcare

NPSA (2007) Safer Practice Notice 15 Ref: NPSA/2007/15 colour and coding hospital cleaning materials and equipment

Health & Safety at Work etc Act 1974

The Management of Health and Safety at Work Regulations 1999

Environmental Protection Act 1990

Environmental Protection (Duty of Care) Regulations 1991



The Waste Management Licensing Regulation 1994

Controlled Waste Regulations 2002

Healthcare Waste Management and Minimisation 2000

The Waste Incineration (England and Wales) Regulation 2002

The Pollution Prevention and Control (England and Wales) Regulation 2000)

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002

Control of Substances Hazardous to Health Regulations (COSHH) 2002

The Landfill (England and Wales) Regulation 2002

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2004

The Hazardous Waste (England and Wales) Regulations 2005

The List of Waste (England) Regulations 2005